

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1. (Currently amended) A wireless data communication method with a portable wireless communication device that is plug connectable to an external port of a first computing device for wireless communication, the wireless communication device previously being distinct from the first computing device, the wireless communication device having

an interface for plug connecting to the external port of the first computing device by a user,

a wireless communication component for wireless communication,

a memory component including a private memory area that is not accessible or viewable by the user,

a protected data stored in the private memory area for executing at the first computing device,

a memory controller having means for managing communication through the interface and means for accessing the private memory area,

the wireless communication method; comprising:

drawing power to the wireless communication device from the first computing device for operating the wireless communication device upon plug connecting a the wireless communication device to an-the external interface port of a the first computing device with a data output service;

accessing the protected data from the private memory area of the wireless communication device by the memory controller of the wireless communication device;

providing a wireless software running and executing on the first computing device at least the protected data by the wireless communication device, installing and executing on the first computing device a computer software application from a memory component of the communication device

automatically, upon plug connecting ~~connection~~ of the wireless communication device to the external interface port of the first computing device;

activating, automatically, at the first computing device the wireless communication device, by the wireless software running on the first computing device, with the protected data received from the wireless communication device that is plug connected to the external port of the first computing device, to provide the first computing device wireless data access over the wireless component of the wireless communication device; and

enabling the first computing device to share Internet access with a second computing device over a local point to point wireless communication link between the first computing device and the second computing device, by the wireless communication device being plug connected to the external port of the first computing device, the second computing device being a distinct device from the first computing device and the wireless communication device.

~~the computer software application providing access to the data output service of the first computing device for a second computing device via wireless communication;~~

~~transmitting by wireless communication data content from a second computing device to the communication device;~~

~~passing the data content from the communication device to the first computing device; and~~

~~passing the data content from first computing device to the data output service associated with the first computing device.~~

2. (Cancelled)

3. (Currently amended) The method of claim 1, further comprising:

~~disconnecting the wireless data output communication device from the external interface port of the first computing device after passing the data content from computer software application to the data output service; and~~

the wireless software automatically uninstalling or exiting at least part of the ~~computer~~ wireless software application from the first computing device upon disconnection of the wireless communication device from the external interface port of the first computing device.

4. (Currently amended) The method of claim 1 further comprising enabling the first computing device wireless Internet access with the portable wireless data communication device ~~in which transmitting the data content to the communication device includes storing the data content in the memory component of the communication device.~~

5. (Cancelled)

6. (Currently amended) The method of claim 1 ~~in which~~ wherein the external interface corresponds to a universal serial bus interface.

7. (Currently Amended) The method of claim 1 ~~in which~~ wherein the wireless communication corresponds to a Bluetooth standard of wireless communication.

8. (Currently amended) The method of claim 1 ~~in which~~ wherein the wireless communication corresponds to at least one of the ~~to a~~ IEEE 802.11 standard standards of wireless communication.

9. (Currently amended) The ~~method~~ device of claim 1 ~~in which the data output service includes printing the data content to one or more selected printers~~ 60, the portable wireless data communication device further comprising means for enabling the first computing device wireless Internet access with the portable wireless data communication device.

10. (Currently amended) The ~~method~~ device of claim 4 ~~61~~ in which the data output ~~device-service~~ includes a display or a projection device, individually or in any combination for displaying or projecting the data content on a display device.

11. (Currently amended) The method of claim ~~19~~ 40 ~~in which the data output service includes projecting the data content onto a projection screen wherein the wireless communication device further includes a public memory component that is accessible and viewable by the user.~~

12. (Currently amended) The method of claim 1 ~~in which~~ wherein the wireless communication device is configured as a dongle.

13. (Currently amended) The method of claim 1 ~~in which~~ wherein the second computing device includes one or more of a wireless mobile telephone, an Internet pad, a laptop computer, a desktop computer, and a smart phone, individually or in any combination.

14. (Currently amended) The method of claim 1 ~~in which~~ wherein the ~~second~~ first computing device includes a mobile computing device.

15. (Currently amended) The ~~method~~ device of claim 4 ~~60~~ ~~in which~~ wherein the second computing device includes ~~a digital camera~~ one or more of an Internet pad, a laptop computer, a desktop computer, and a smart phone, individually or in any combination.

16. (Currently amended) The method of claim 1 ~~in which~~ wherein the ~~computer~~ wireless software application includes a wireless communication stack component.

17. (Cancelled)

18. (Currently amended) The method of claim 1 wherein at least part of the wireless software is stored in the memory component of the wireless communication device, and the wireless software is installed and executed automatically upon connection of the communication device to the external port of the first computing device ~~further comprising selecting one or more printers output devices at the second computing device prior to transmitting by wireless communication computer information from the second computing device to the first computing device.~~

19. (Currently amended) A data wireless communication method with a portable wireless communication device plug connectable to an external port of a first computing device with a data output device, the wireless communication device previously being distinct from the first computing device, the wireless communication device having,

an interface for plug connecting to the external port of the first computing device by a user,

a wireless communication component for wireless communication,

a memory component that includes a private memory area that is not accessible or viewable by the user,

a protected software component stored in the private memory area for executing at the first computing device,

a memory controller having means for managing communication through the interface and means for accessing the private memory area,

the wireless communication method comprising:

~~transmitting by wireless communication data content from a first computing device to a wireless data output communication device;~~

~~storing the data content in a memory component of the communication device;~~

plug connecting the wireless communication device to an the external interface port of a second the first computing device with a data output service;

drawing power to the wireless communication device from the first computing device for operating the wireless communication device;

accessing the protected software component from the private memory area of the wireless communication device by the memory controller of the wireless communication device;

running and executing on the first computing device at least part of a wireless communication software that includes the protected software component from the private memory area of the wireless communication device, automatically, upon plug connecting the wireless communication device to the external port of the first computing device by the user;

establishing a wireless communication channel, by the wireless communication software executing at the first computing device, between a second computing device and the wireless communication device and over the wireless component of the wireless communication device, the second computing device being a distinct device from the wireless communication device and the first computing device;

receiving, at the wireless communication device that is plug connected to the first computing device, a data content from the second computing device over the wireless communication channel; and

~~installing and executing on the second computing device a computer software application from the memory component automatically upon connection of the communication device to the external interface of the second computing device, the computer software application providing access to the data output service of the second computing device;~~

passing, by the wireless communication software, the data content from the wireless communication device to the first computing device for output of the data content at the output device associated with the first computing device to enable the second computing device to output the data content from the second computing device to the output device associated with the first computing device over the wireless communication channel. ~~computer software application on the second computing device; and~~

~~passing the data content from computer software application to the data output service of the second computing device.~~

20. (Cancelled)

21. (Currently amended) The method of claim 19, further comprising:
disconnecting the wireless ~~data output~~ communication device from the external interface port of the second first computing device ~~after passing the data content from computer software application to the data output service~~; and
automatically uninstalling or exiting at least part of the computer wireless communication software application from the second first computing device upon disconnection of the wireless communication device from the external port of the ~~second~~ first computing device.

22. (Currently amended) The method of claim 19 ~~in which~~ wherein the wireless communication ~~computer software application~~ includes a wireless communication stack component.

23. (Currently amended) The method of claim 19 ~~in which~~ wherein the wireless communication device includes a battery operable to power operation of the wireless communication device.

24-39. (Cancelled)

40. (Currently amended) The method of claim 4 ~~19 in which~~ wherein the wireless communication correspond to one or more of a Zigbee, a Bluetooth, and an IEEE802 standard of wireless communication, individually or in any combination.

41. (Currently amended) The method of ~~claim 10~~ claim 19 wherein in which the data output ~~service~~ device further includes an audio output device for outputting digital data content to a sound output device.

42. (Currently amended) The method of ~~claim 1~~ claim 19 wherein in which the computer wireless communication software includes a wireless application software that provides the first computing device with wireless capability to communicate with the second computing device Internet access.

43. (Currently amended) The method of claim 19 ~~in which~~ wherein the output ~~service~~ includes displaying data content on device includes a display device or a projection device for displaying or for projecting the data content.

44. (Currently amended) The method of claim 19 ~~in which~~ wherein the output ~~service~~ includes outputting device includes a printing device for printing the data digital content to a sound output device.

45. (Currently amended) The method of claim 19 ~~in which~~ wherein the data content includes one or more of video data content, sound data content, document data content, and projection data content, individually or in any combination.

46. (Currently amended) The method of claim 19 ~~in which the first computing device is a mobile device~~ further comprising storing the received data content at the memory component of the wireless communication device prior to passing the data content to the output device.

47. (Currently Amended) The method of claim 19 ~~in which~~ wherein the second computing device is a mobile device.

48. (Currently amended) A ~~wireless data~~ communication method with a portable communication device for enabling phone calling from a computing device, the portable communication device having,

an interface for plug connecting to an external port of a first computing device by a user,

a memory component that includes a private memory area that is not accessible or viewable by the user,

a protected software component stored in the private memory area for executing at the first computing device,

a memory controller having means for managing communication through the interface, means for accessing the private memory area, and means for facilitating an autorun operation for automatically launching and executing on the first computing device at least a phone calling software,

the communication method comprising:

plug connecting a ~~wireless~~ the portable communication device to an the external interface ~~port~~ of a the first computing device with a data output component;

drawing power to the portable communication device from the first computing device for operating the portable communication device;

accessing the protected software component from the private memory area of the portable communication device by the memory controller of the portable communication device;

installing ~~and executing~~ or running on the first computing device a-at least part of the phone calling software, automatically, upon connecting the portable communication device to the external port of the first computing device, the phone calling software including the protected software component accessed from the private application from the memory component area of the portable communication device by the memory controller; , the software application providing access to the data output component of the first computing device;

enabling phone calling from the first computing device to a second computing device with the phone calling software running at the first computing

device and the portable communication device being plug connected to the external port of the first computing device, the second computing device being a distinct device from the portable communication device and the first computing device; and

disconnecting the portable communication device from the external port of the first computing device, and upon disconnecting the portable communication device from the external port of the first computing device, the phone calling software automatically exiting or uninstalling at least part of the phone calling software from the first computing device.

~~transmitting by wireless communication data content from a second computing device to the wireless communication device;~~

~~storing the data content in a memory component of the communication device;~~

~~retrieving the data content from a memory component of the communication device and passing the data content from the communication device to the software application on the first computing device; and~~

~~passing the data content from software application to the data output component of the first computing device.~~

49. (Currently amended) The method of claim 48 in which wherein the output component includes a display screen. first computing device includes one or more of a desktop PC, a laptop PC, a tablet computer, a server, a handheld computer, an Internet information appliance, a mobile phone, and a web pad, individually or in any combination thereof.

50. (Currently amended) The method of claim 48 in which wherein the communication device further comprising a hub with one or more ports for connecting to a device ~~the output component includes a projector for projecting data content to a projection screen.~~

51. (Currently amended) The method of claim 48 ~~in which~~ wherein the ~~computer phone calling software application~~ is installed and executed automatically upon connection of the communication device to the external interface port of the first computing device.

52. (Currently amended) The method of claim 48 ~~in which~~ wherein the phone calling software further facilitates Internet access at the first computing device ~~the output component includes a sound output device.~~

53. (Currently amended) The method of claim 48 ~~in which~~ wherein the ~~output component includes a printer~~ memory component further includes a public memory area that is accessible and viewable by the user.

54. (Currently amended) The method of claim 48 ~~in which the data content includes one or more of video data content, sound data content, document data content, and projection data content~~ further comprising intercepting a disconnection signal at the first computing device and in response to intercepting the disconnection signal removing or uninstalling at least part of the phone calling software from the first computing device.

55. (Currently amended) A data communication method, with a portable data communication device that is plug connectable to an external port of at least a first and a second computing device, the data communication device having

an interface for plug connecting to an external port of one or more computing devices by a user,

a memory component that includes a private memory area that is not accessible or viewable by the user,

a protected software component stored in the private memory area for executing at the one or more computing devices,

a memory controller having means for managing communication through the interface and means for accessing the private memory area,

a public memory component that is accessible and viewable by the user, the data communication method comprising:

plug connecting a the data communication device with a memory component to an external interface port of a first computing device;

receiving, at the data communication device, at least part of a first device data content from the first computing device;

storing at least part of the first device data content, received from the first computing device, in the public memory component of the data communication device;

~~transmitting data content from the first computing device to the data communication device, storing the data content in the memory component of the data communication device, and~~

~~disconnecting the data communication device from the external interface port of the first computing device;~~

plug connecting the data communication device to an external interface port of a second computing device with a data output service, the second computing device being a distinct device from the data communication device and the first computing device;

drawing power to the data communication device from the second computing device for powering the data communication device;

accessing the protected software component from the private memory area of the data communication device by the memory controller of the data communication device, the access of the protected software component for facilitating an autorun operation associated with installing or running on the second computing device at least part of a computer software application;

installing and executing or running on the second computing device at least part of a computer software application that includes the protected software component from the from a protected private memory area component of the memory component of the data communication device, automatically, upon

~~connection plug connecting~~ of the data communication device to the external interface port of the second computing device, ~~the computer software application providing access to the data output service of the second computing device;~~

accessing the first device data content stored in the public memory component of the data communication device by the computer software application running on the second computing device;

storing a second device data content from the second computing device to the public memory component of the data communication device;

synchronizing, by the computer software application running at the second computing device, at least part of the second device data content between the public memory component of the data communication device and the second computing device;

~~passing the data content from the memory component of the communication device to the computer software application on the second computing device and passing the data content from computer software application to the data output service of the second computing device; and~~

disconnecting the communication device from the external interface port of the second computing device and the computer software application automatically exiting or uninstalling at least part of the software application from the second computing device, including automatically deleting any temporary files used by the software application residing in the computing device.

56. (New) The method of claim 55 wherein the data communication device includes a wireless component and the computer software application includes a wireless application for providing wireless communication to the second computing device over the wireless component.

57. (New) The method of claim 55 further comprising automatically deleting any temporary files that includes the data content used by the computer software residing in the second computing device upon disconnection of the data communication device.

58. (New) The method of claim 55, the second computing device further comprising an output device including one or more of a display device, a projection device, and an audio output device, individually or in any combination.

59. (New) The method of claim 58, the data communication device further comprising means for the computer software running at the second computing device to pass at least part of a data content from the public memory component of the data communication device to the second computing device for rendering the at least part of the data content at the data output device associated with second computing device.

60. (New) A portable wireless communication device plug connectable to an external port of a first computing device for wireless communication, the wireless communication device previously being distinct from the first computing device, and the wireless communication device having,

an interface for plug connecting to the external port of the first computing device by a user,

a wireless communication component for wireless communication,

a memory component that includes a private memory area that is not accessible or viewable by the user,

a protected data stored in the private memory area for executing at the first computing device,

a memory controller having means for managing communication through the interface and means for accessing the private memory area, the wireless communication device comprising,

means for drawing power to the wireless communication device from the first computing device for operating the wireless communication device upon plug connecting the wireless communication device to the external port of the first computing device;

means for accessing the protected data from the private memory area of the wireless communication device by the memory controller of the wireless communication device;

means for providing a wireless software running and executing on the first computing device at least the protected data by the wireless communication device, automatically, upon plug connecting the wireless communication device to the external port of the first computing device;

means for the wireless software running and executing at the first computing device to activate the wireless communication device with the protected data received from the wireless communication device automatically to provide the first computing device wireless data access over the wireless component of the wireless communication device, the wireless communication device being plug connected to the external port of the first computing device;
and

means for the wireless communication device that is plug connected to the external port of the first computing device to enable the first computing device to share Internet access with a second computing device over a local point to point wireless communication link between the first computing device and the second computing device, the second computing device being a distinct device from the first computing device and the wireless communication device.

61. (New) A portable wireless communication device plug connectable to an external port of a first computing device with a data output device, the wireless communication device previously being distinct from the first computing device, the wireless communication device having,

an interface for plug connecting to the external port of the first computing device by a user,

a wireless communication component for wireless communication,

a memory component that includes a private memory area that is not accessible or viewable by the user,

a protected software component stored in the private memory area for executing at the first computing device,

a memory controller having means for managing communication through the interface and means for accessing the private memory area, the wireless communication device comprising:

means for drawing power to the wireless communication device from the first computing device for operating the wireless communication device;

means for accessing the protected software component from the private memory area of the wireless communication device by the memory controller of the wireless communication device;

means for running and executing on the first computing device at least part of a wireless communication software that includes the protected software component from the private memory area of the wireless communication device, automatically, upon plug connecting the wireless communication device to the external port of the first computing device by the user;

means for establishing a wireless communication channel, by the wireless communication software executing at the first computing device, between a second computing device and the wireless communication device and over the wireless component of the wireless communication device, the second computing device being a distinct device from the wireless communication device and the first computing device;

means for receiving, at the wireless communication device that is plug connected to the first computing device, a data content from the second computing device over the wireless communication channel; and

means for the wireless communication software to pass the data content from the wireless communication device to the first computing device for output of the data content at the output device associated with the first computing device to enable the second computing device to output the data content from the second computing device to the output device associated with the first computing device over the wireless communication channel.

62. (New) A portable communication device for enabling phone calling having,

an interface for plug connecting to an external port of a first computing device by a user,

a memory component that includes a private memory area that is not accessible or viewable by the user,

a protected software component stored in the private memory area for executing at the first computing device,

a memory controller having means for managing communication through the interface, means for accessing the private memory area, and means for facilitating an autorun operation for automatically launching and executing on the first computing device at least a phone calling software, the portable communication device comprising,

means for plug connecting the portable communication device to the external port of the first computing device;

means for drawing power to the portable communication device from the first computing device for operating the portable communication device;

means for accessing the protected software component from the private memory area of the portable communication device by the memory controller of the portable communication device;

means for installing or running on the first computing device at least part of the phone calling software, automatically, upon connecting the portable communication device to the external port of the first computing device, the phone calling software including the protected software component accessed from the private memory area of the portable communication device by the memory controller;

means for the phone calling software running at the first computing device to enable phone calling from the first computing device to a second computing device, with the portable communication device plug connected to the external port of the first computing device, the second computing device being a

distinct device from the portable communication device and the first computing device; and

means for disconnecting the portable communication device from the external port of the first computing device, and upon disconnecting the portable communication device from the external port of the first computing device, the phone calling software automatically exiting or uninstalling at least part of the phone calling software from the first computing device.

63. (New) A portable data communication device with a memory component and plug connectable to an external port of at least a first and a second computing device, the data communication device having

an interface for plug connecting to an external port of one or more computing devices by a user,

a memory component that includes a private memory area that is not accessible or viewable by the user,

a protected software component stored in the private memory area for executing at the one or more computing devices,

a memory controller having means for managing communication through the interface and means for accessing the private memory area,

a public memory component that is accessible and viewable by the user,

the data communication device comprising,

means for plug connecting the data communication device to an external port of a first computing device;

means for receiving, at the data communication device, at least part of a first device data content from the first computing device;

means for storing at least part of the first device data content, received from the first computing device, in the public memory component of the data communication device;

means for disconnecting the data communication device from the external port of the first computing device;

means for plug connecting the data communication device to an external port of a second computing device, the second computing device being a distinct device from the portable communication device and the first computing device;

means for drawing power to the data communication device from the second computing device for powering the data communication device;

means for accessing the protected software component from the private memory area of the data communication device by the memory controller of the data communication device, the access of the protected software component for facilitating an autorun operation associated with installing or running on the second computing device at least part of a computer software application;

means for installing or running on the second computing device at least part of a computer software application, that includes the protected software component from the private memory area of the memory component of the data communication device, automatically, upon plug connecting the data communication device to the external port of the second computing device;

means for the computer software application running on the second computing device to access the first device data content stored in the public memory component of the data communication device;

means for storing a second device data content from the second computing device to the public memory component of the data communication device;

means for the computer software application running at the second computing device to synchronize at least part of the second device data content between the public memory component of the data communication device and the second computing device; and

means for disconnecting the data communication device from the external port of the second computing device, and upon disconnecting the data communication device from the external port of the second computing device, the computer software application automatically exiting or uninstalling at least part of the computer software application from the second computing device.